

Early and Late Phase Airway Hyperresponsiveness After Aerosol Challenge of Antigen

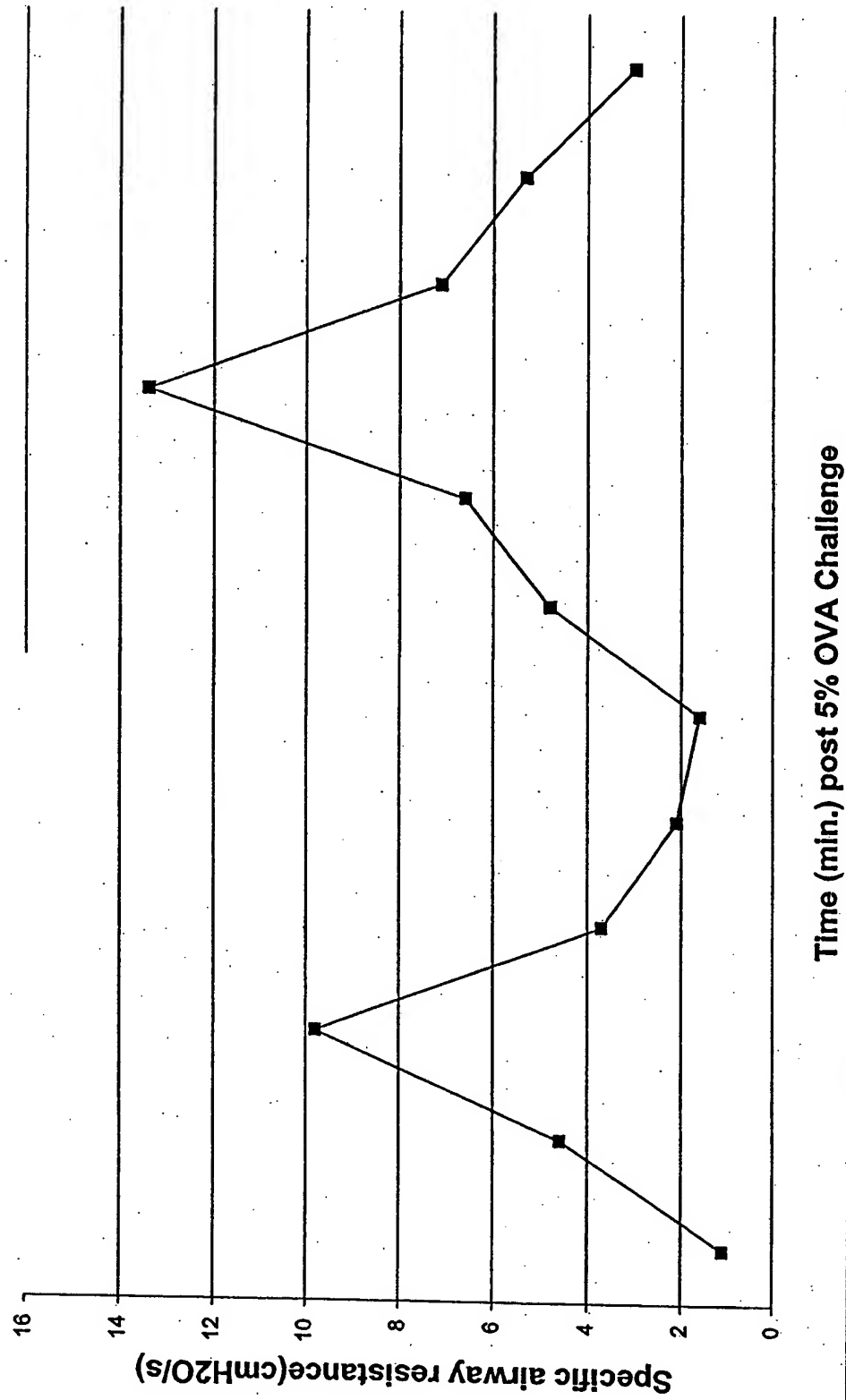


Figure 1

Induction of Asthmatic Attack in Normal BALB/c Mice and Effect of Prophylactic C5 Inhibition

<u>Group & Schedule:</u>	<u>day 1, 14</u>	<u>day 25, 29, 32</u>	<u>day 28, 29, 30</u>	<u>day 33</u>
P. Control	Ova + Alum	135.8, 40mg/kg	1% OVA aerosol	5% OVA aerosol
Anti-C5	Ova + Alum	BB5.1, 40mg/kg	1% OVA aerosol	5% OVA aerosol
Steroid	Ova + Alum	Dex	1% OVA aerosol	5% OVA aerosol
N. Control	PBS + Alum	PBS	PBS	PBS

Figure 2a

The prophylactic treatment schedule

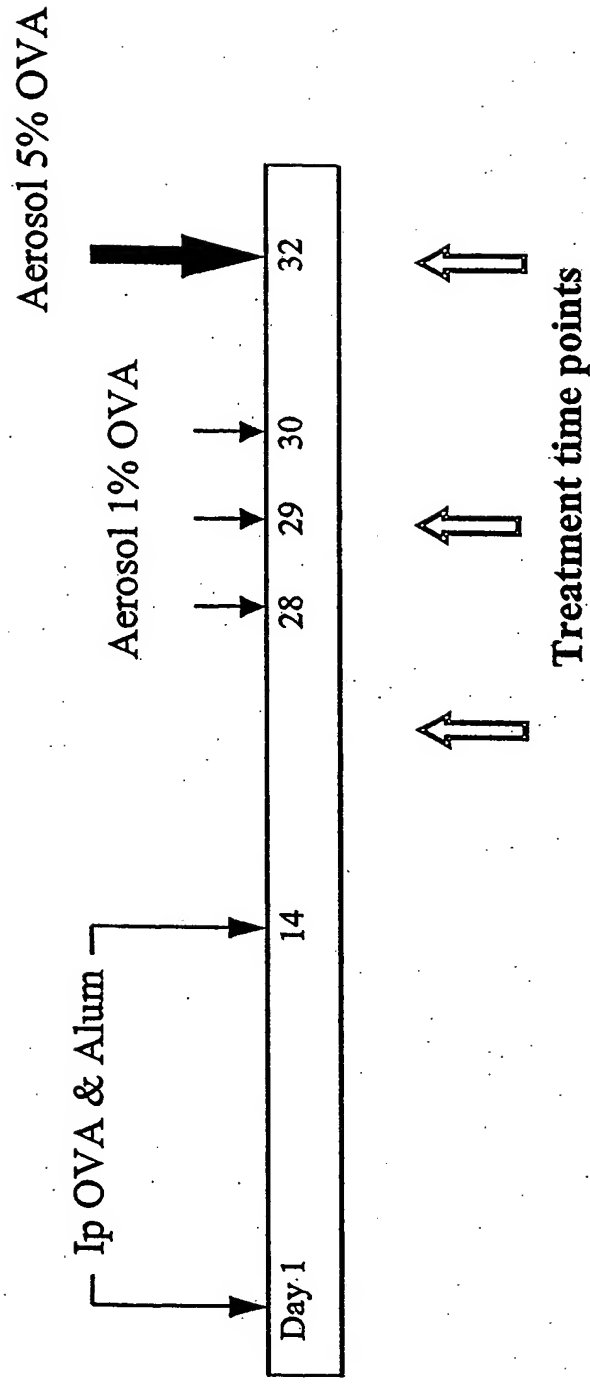


Figure 2b

Induction of Asthmatic Attack in Normal BALB/c Mice and Effect of Prophylactic C5 Inhibition

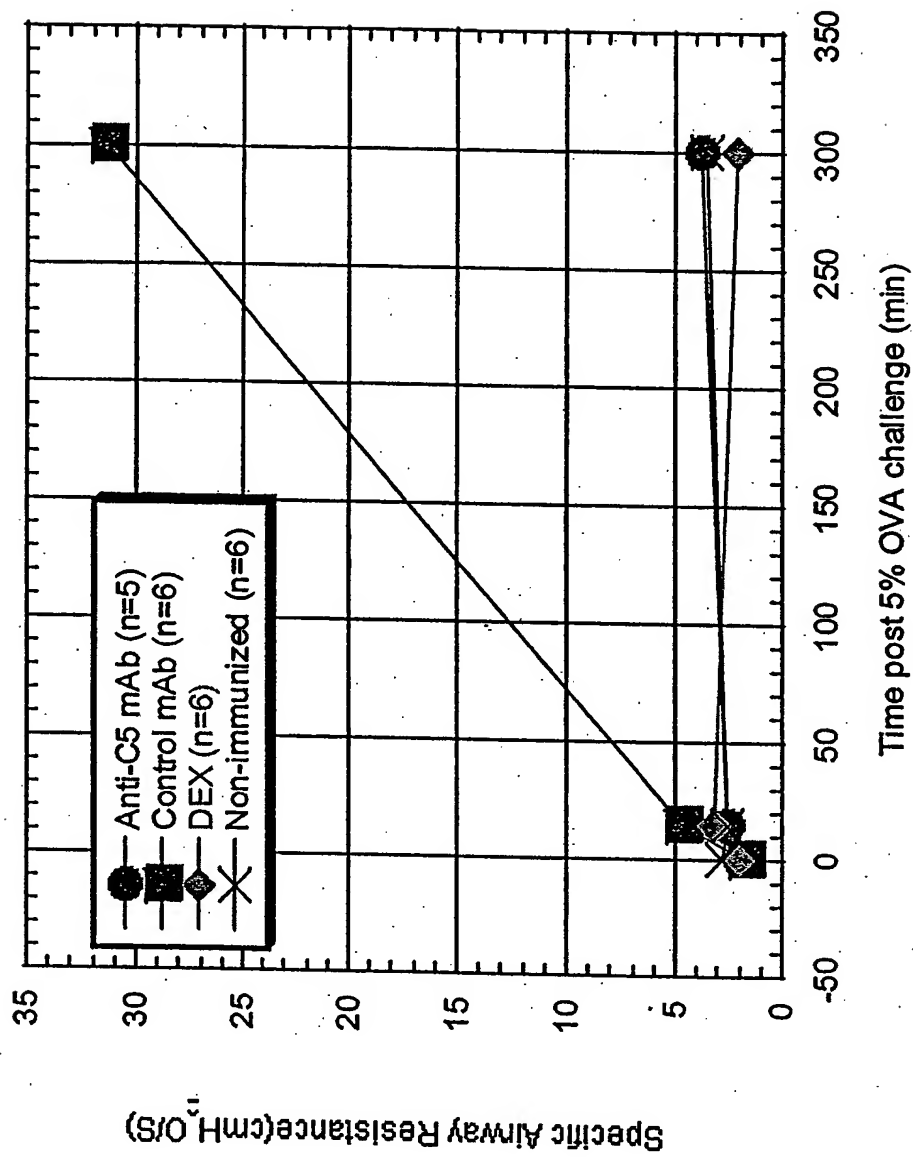


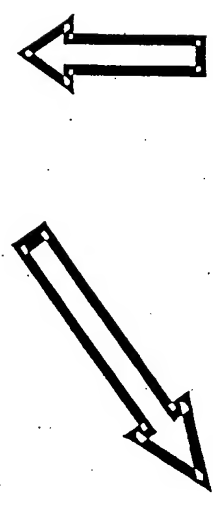
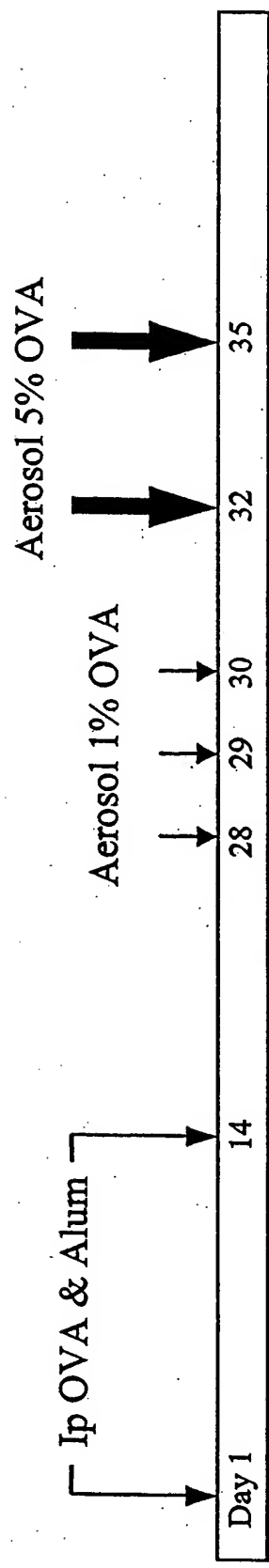
Figure 3

Effect of Therapeutic C5 Inhibition (Aerosol or IV) During Asthmatic Attack

<u>Group & Schedule:</u>		<u>day 1, 14</u>	<u>Aerosol on day 28-30 & day 32</u>	<u>day 35</u>	<u>day 35</u>
P.Control	Ova + Alum		1% ova on day 29-30, 5% on 32	5% OVA	IV or aerosol 135.8
Anti-C5	Ova + Alum		1% ova on day 29-30, 5% on 32	5% OVA	IV or aerosol BB5.1
Steroid	Ova + Alum		1% ova on day 29-30, 5% on 32	5% OVA	IV or aerosol Dex
N.Control	PBS + Alum		PBS on day 29-30, PBS on 32	PBS	IV or aerosol PBS

Figure 4a

Induction of Asthmatic Attack in Balb/c Mice



- Animals were randomized into 6 treatment groups prior next challenge

Increased Airway Resistance Seen In Group of 32 Animals

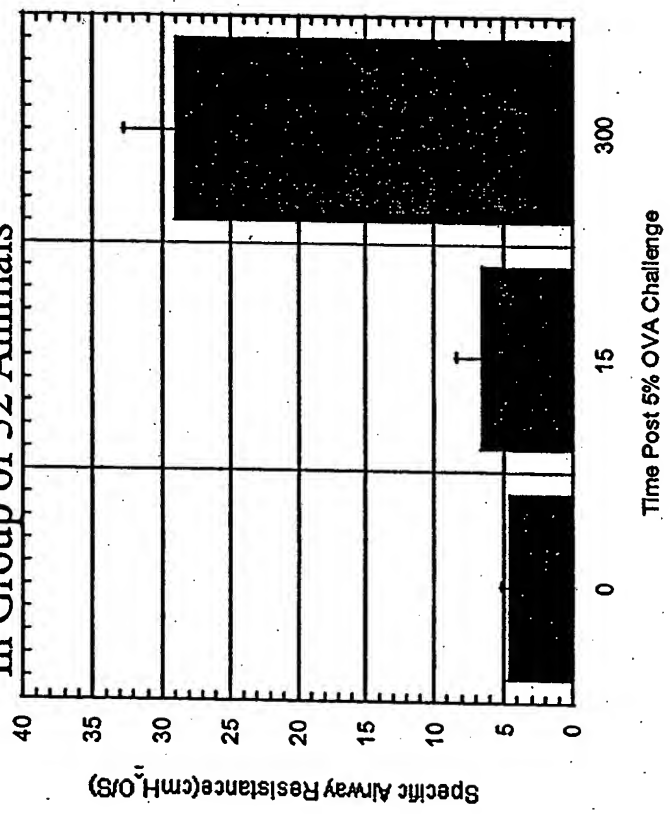


Figure 4b

Effect of Aerosol anti-C5 mAb Treatment During Asthmatic Attack

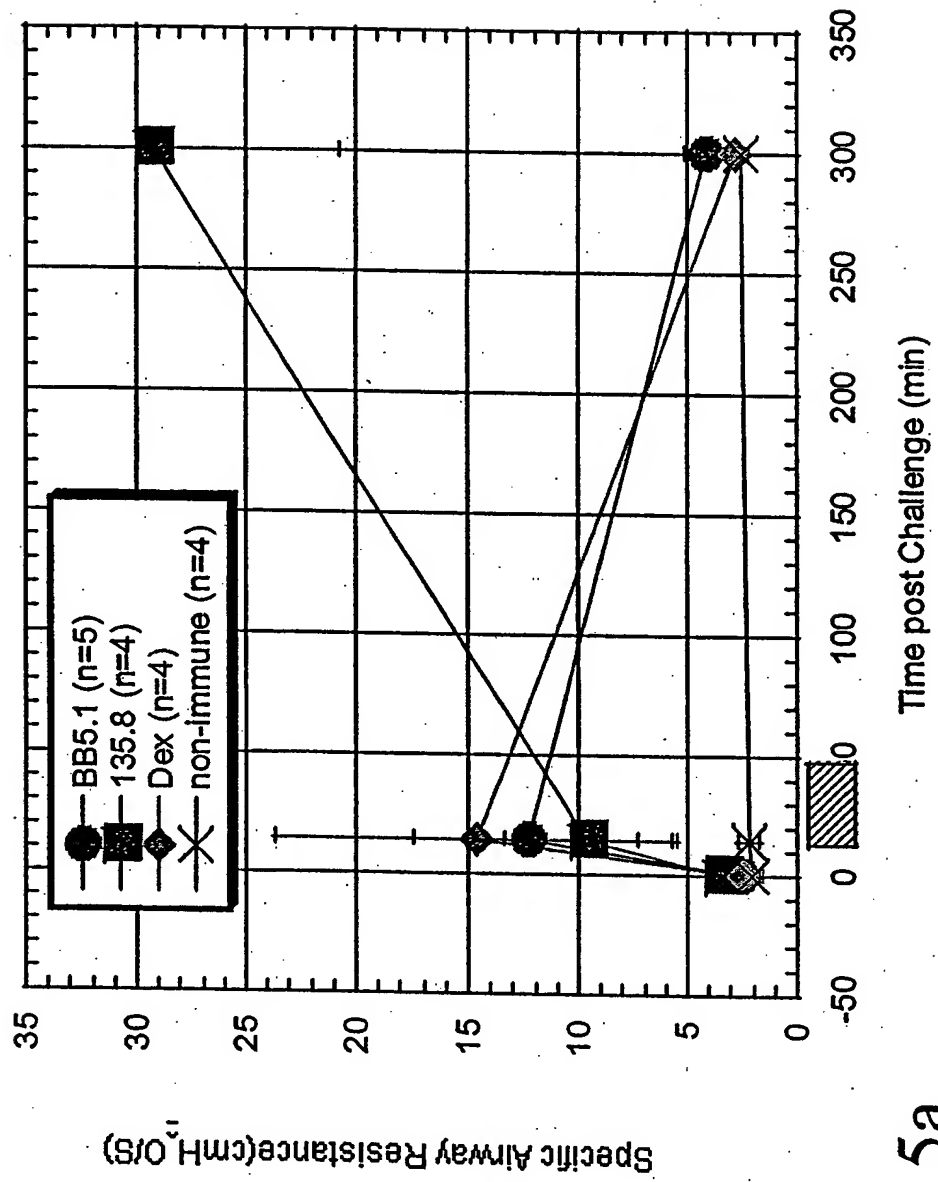


Figure 5a

Effect of Aerosol anti-C5 mAb Treatment During Asthmatic Attack (Continuous Measurement)

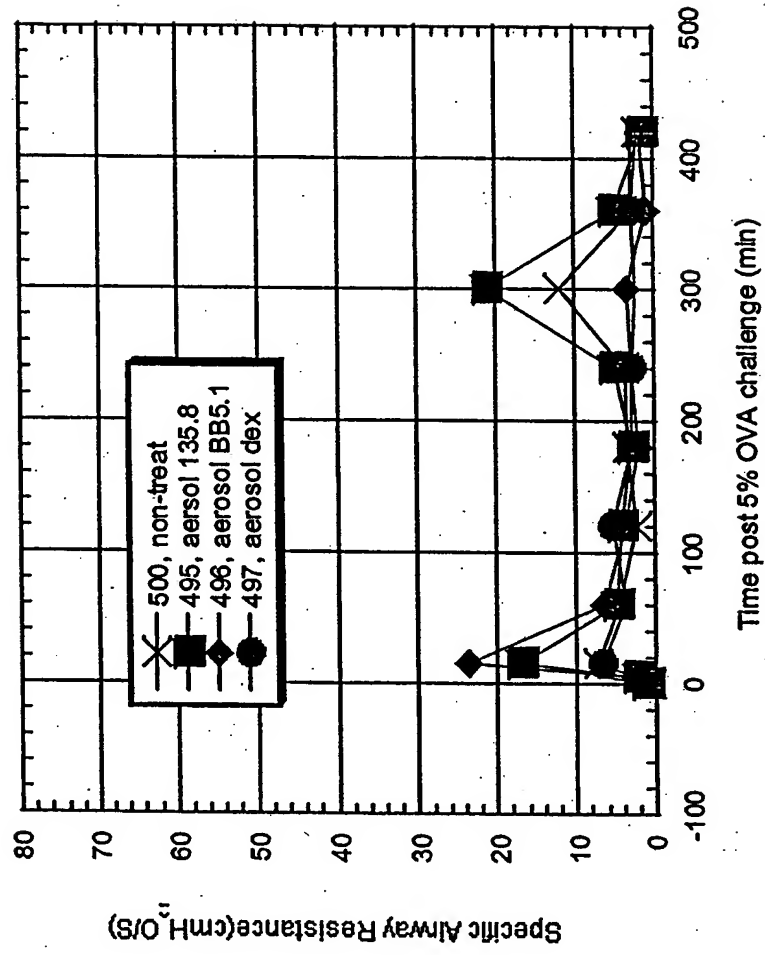


Figure 5b

Effect of IV anti-C5 mAb Treatment During Asthmatic Attack

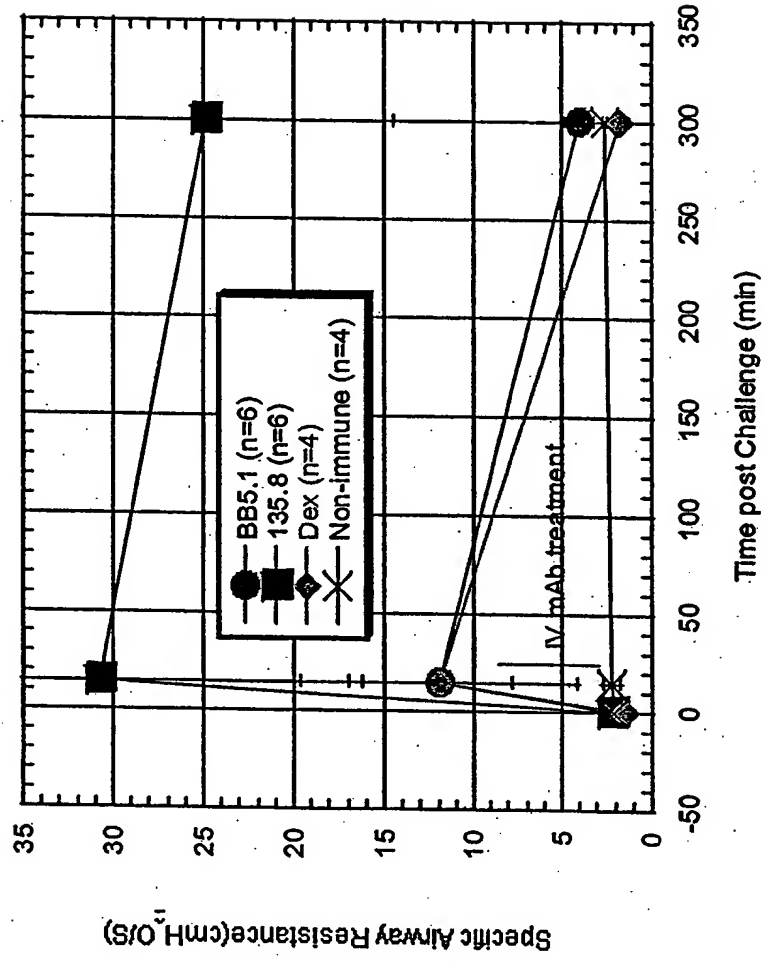


Figure 6a

Effect of IV anti-C5 mAb Treatment During Asthmatic Attack (Continuous Measurement)

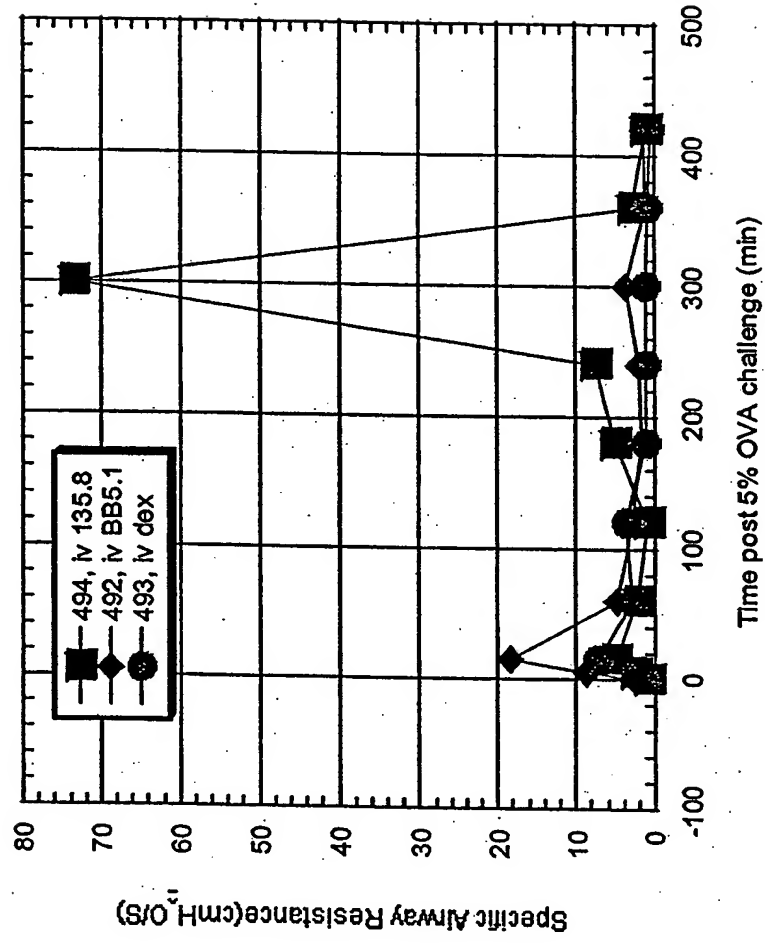


Figure 6b

Serum C5 Activity 6 hr. After Treatment

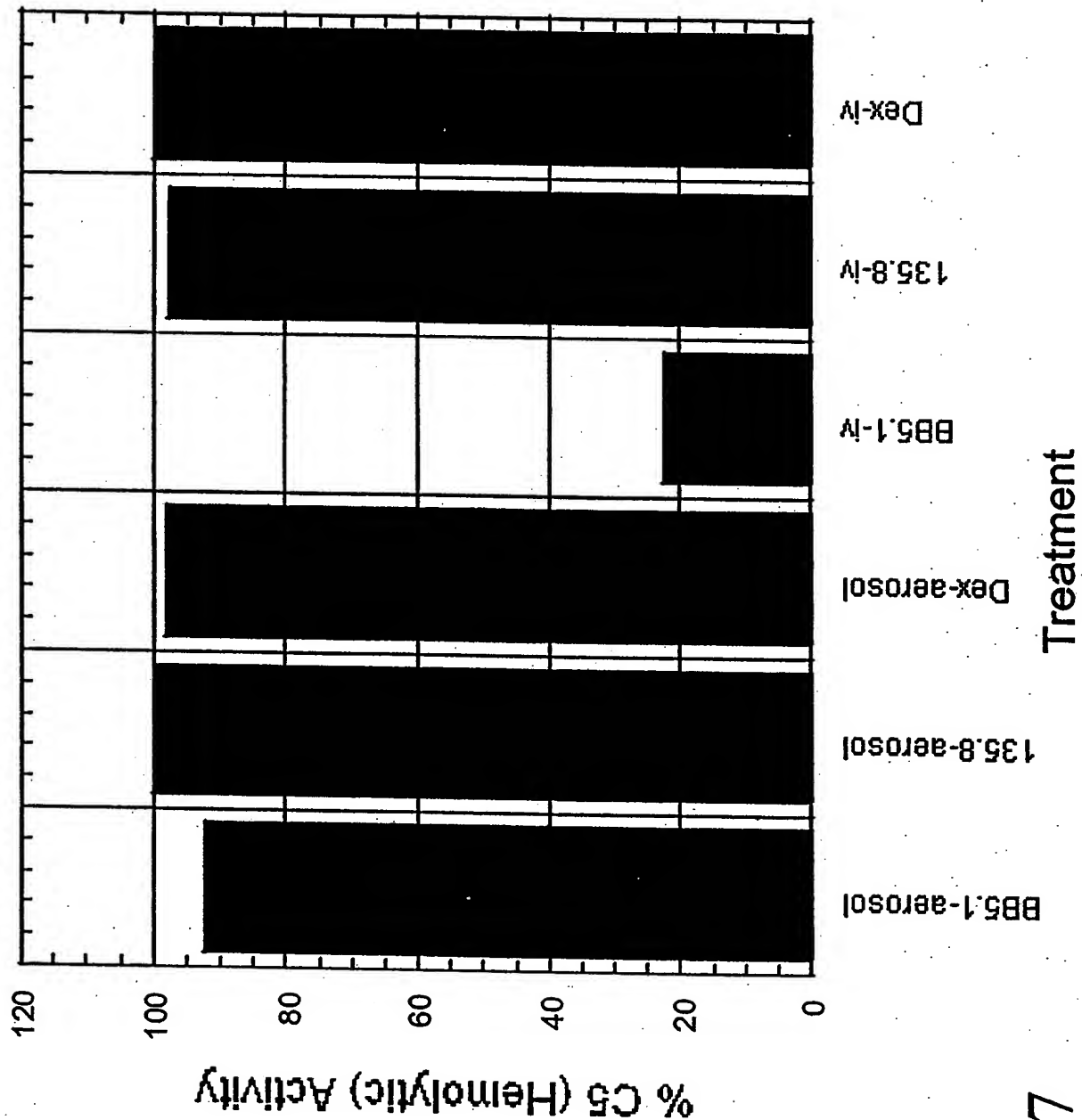
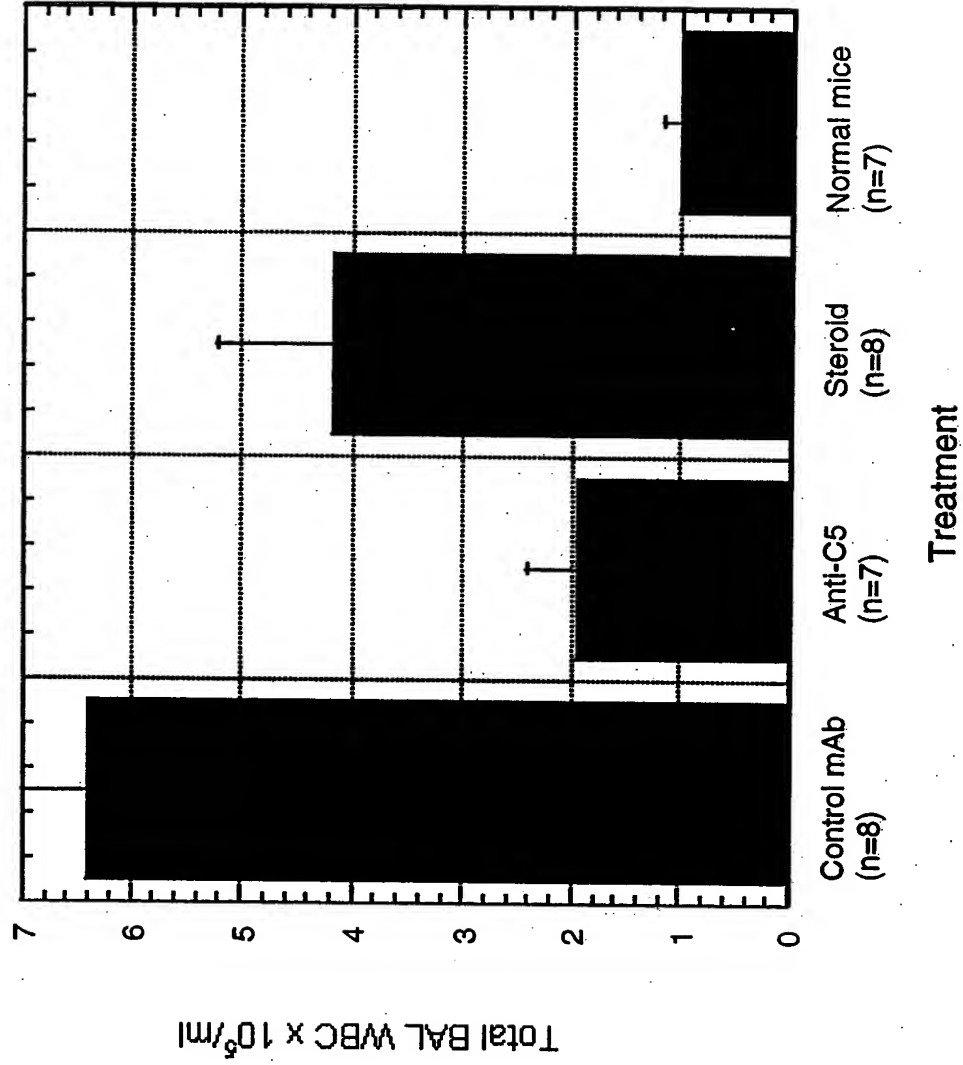


Figure 7

Effect of Steroid and anti-C5 Treatment on BAL total WBC Count
(5hr after OVA challenge and mAb treatment)



Eosinophils are the predominant inflammatory cells in BAL



Fig. 9A: Non-immunized

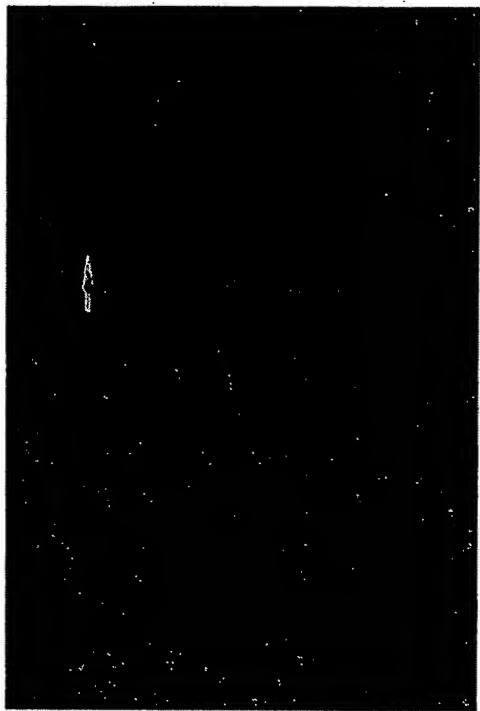


Fig. 9B: Control mAb



Fig. 9C: Steroid



Fig. 9D: Anti-C5

BAL WBC Differential Analysis

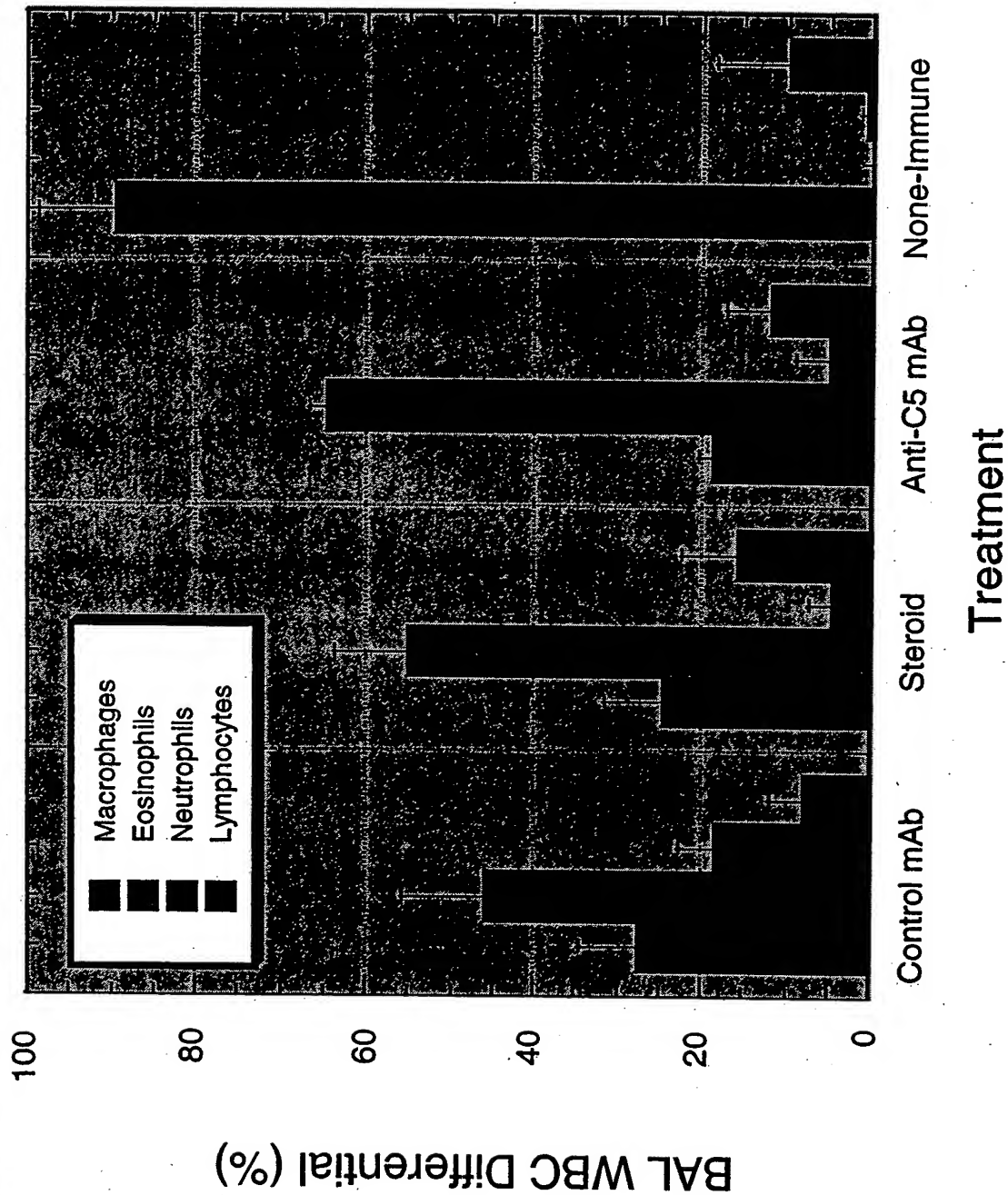
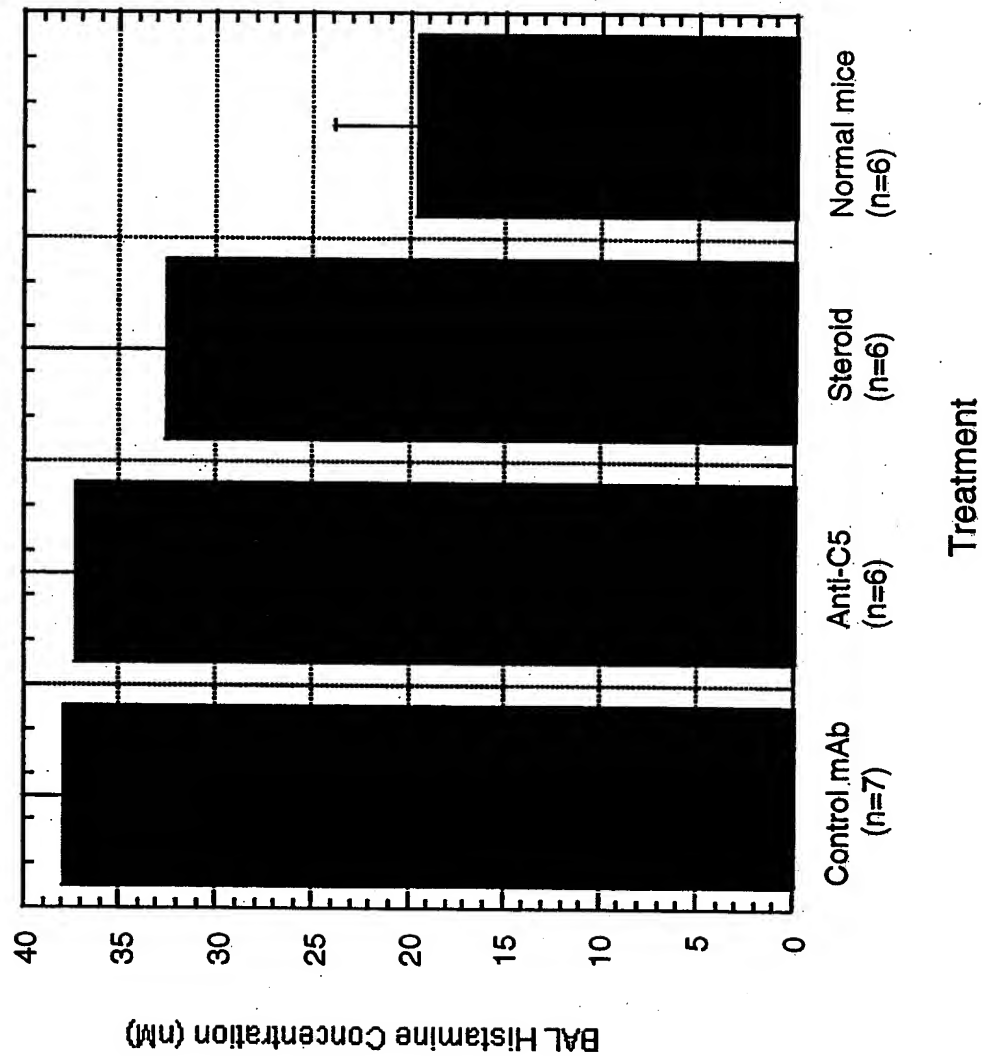
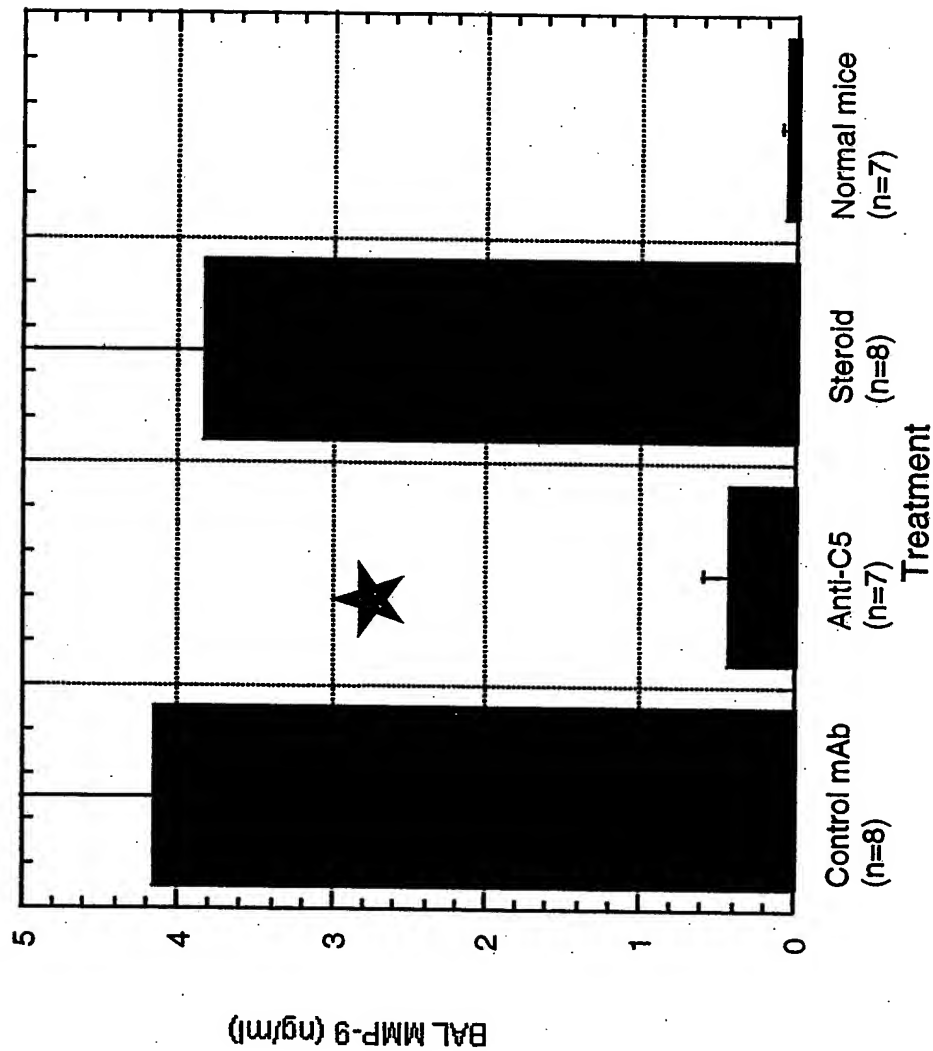


Fig. 10

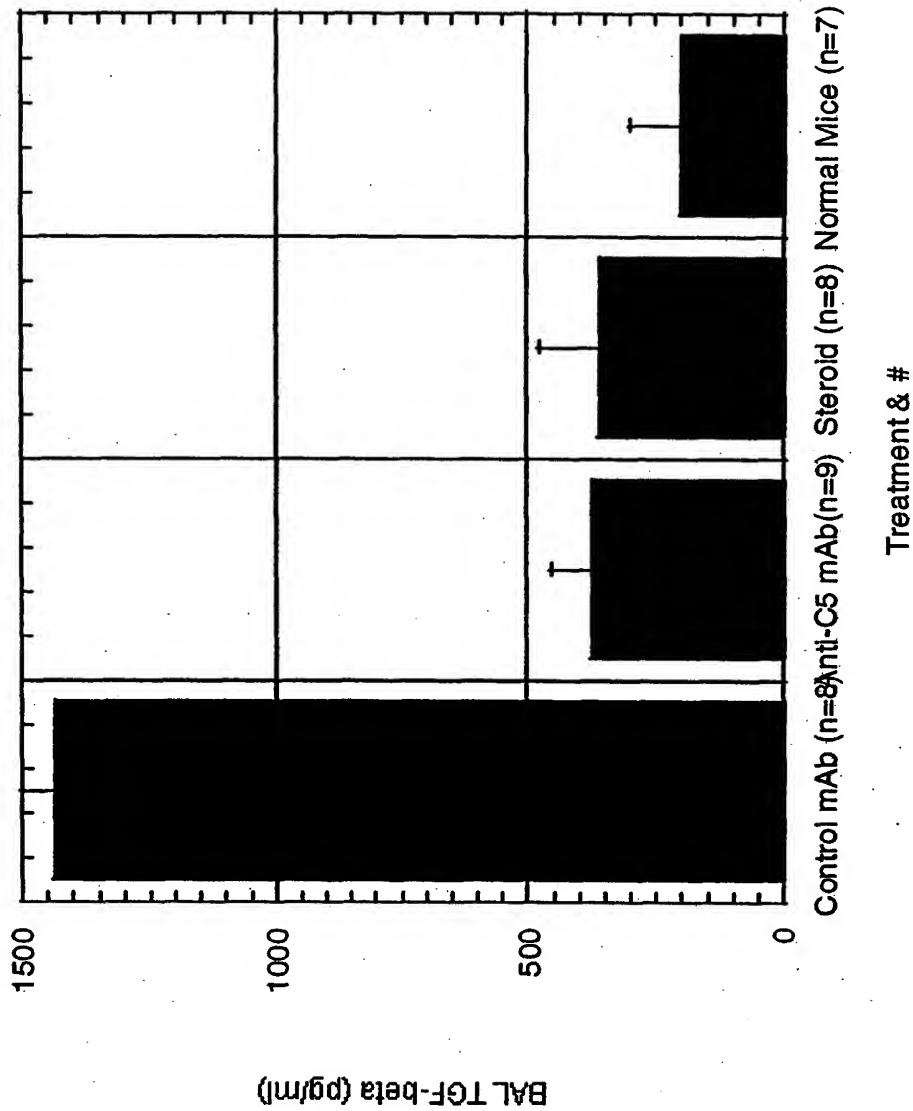
Effect of Steroid and anti-C5 Treatment on BAL Histamine Level (5hr after OVA challenge and mAb treatment)



**New Data: Effect of Steroid and anti-C5 Treatment on BAL MMP-9 Level
(5hr after OVA challenge and mAb treatment)**



Steroid and Anti-C5 mAb Treatment Block the Production of TGF-beta During Asthmatic Attack



Test the Direct & Immediate Bronchial Dilation Effect of C5 Inhibitor Or In Combination with Salbutamol During Wheezing (Provocation with Allergen)

Cannulation & Aerosol C5 inhibitor or β_2 agonist & Testing RL simultaneously

Aerosol 5% OVA

IP OVA & Alum

Aerosol 1% OVA

on day 32 & 35



Immediate effect?

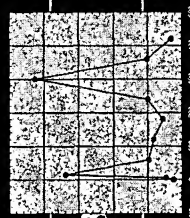
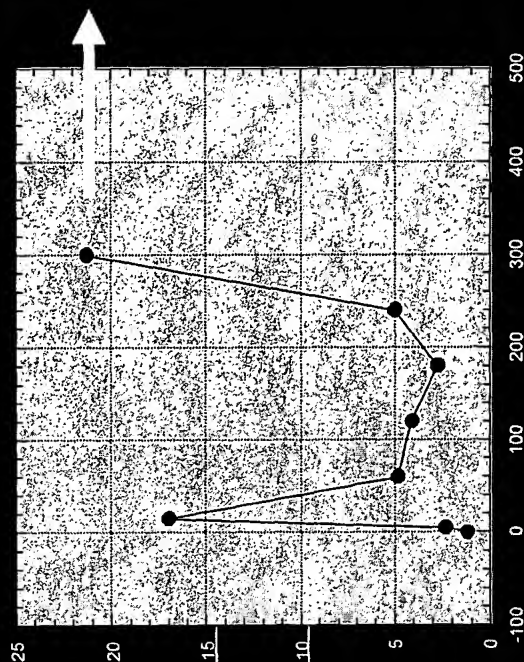


Fig. 14

Fig. 15

Test the Direct & Immediate Bronchial Dilation Effect of C5 Inhibitor Or In Combination with Salbutamol During Wheezing

